Avian Influenza

Information for Soldiers, Sailors, Airmen, Marines and Families

HQ USPACOM/J07

14 February 2006

What is the “seasonal flu”?

- Influenza is also commonly known as "the flu“
- Happens each year, usually in fall/winter in U.S.
- Caused by the influenza virus
  - Virus infects the respiratory tract (nose, throat and lungs)
- Spread via respiratory droplets (coughing/sneezing)
- Highly contagious
- 1-4 days (normally 2 days) from time of exposure for symptoms to develop
- Virus can be spread from those infected to others before symptoms show

What is the “seasonal flu”?

- **Flu virus changes slightly each year to create new strains (this is why a flu shot is needed annually)**
- **Vaccines developed each year to counter new strain**
- **Seasonal flu causes mild illness; can be severe in rare cases**
- **Fatal cases**
  - **36,000 people on average die each year in U.S. from seasonal flu virus**
  - **Elderly and those with weakened immune systems at higher risk**

What is “Bird Flu”?

- Also known as Avian Influenza (AI)
- A viral illness highly contagious in birds
- Some strains can cause severe illness/death in domestic birds (i.e., chickens, ducks, etc.)
- May be spread by certain migratory birds
- Human infections have occurred--some were fatal
- Nearly all human cases so far were among people in close contact with infected birds
- A few cases reported from very close contact with acutely infected person (ie., relative at home)
- No sustained communicable human-to-human yet

Why worry about Bird Flu?

- **Though infrequent, very serious infection for humans**
- **Human death rate currently around 45%**
  - **Rate may decrease if bird flu infections follow historical patterns of past influenza outbreaks**
  - **1918 flu pandemic death rate was lower (approx 1-2 %)**
- **Virus may change to allow easier human-to-human spread, more like seasonal flu**
  - **This would allow rapid, possibly global, spread of disease**
  - **Can’t predict when this will happen**
- **No human natural immunity to bird flu virus**

What is “Pandemic Influenza (PI)”?

- **Pandemic: Widespread/ World-wide epidemic**
- **Previous pandemics include plague (“Black Death”) during Middle Ages and 1918 Spanish Flu**
- **Three conditions required for a pandemic to start:**
  - **New virus (like AI) is introduced to humans**
  - **Virus changes to be easily passed from person to person**
  - **People travel and move, carrying virus**

How does PI differ from seasonal flu?

- **Seasonal Influenza**
  - Occurs in cooler parts of year (winter in USA)
  - Affects ~10% of population
  - Usually mild and not life threatening
  - Very young and very old are at highest risk
  - Some people have some level of pre-existing immunity
  - Vaccine is available
  - Antiviral drugs are available to treat the few people at special risk
- **Pandemic Influenza**
  - Occurs historically every 10-40 years, at any time of year
  - May affect ~50% of population
  - Often more serious
  - All age groups at risk
  - People have little/no pre-existing immunity
  - Vaccine unlikely to be available at first; may take six months or more to develop and distribute
  - Many people affected, so antiviral drugs may be in limited supply

What are symptoms of AI in humans?

- **Typical flu-like symptoms:**
  - **Fever (>100.4 F)**
  - **Headache**
  - **Cough**
  - **Difficulty breathing**
  - **Muscle aches**

- **Additional AI symptoms:**
  - **Eye infections**
  - **Can progress to severe pneumonia**
  - **Pneumonia / Adult Respiratory Distress Syndrome**
  - **Diarrhea and Gastrointestinal problems**

How is AI spread?

- **Direct contact with infected poultry (i.e., chickens, turkeys, ducks, etc.)**
  - **Poultry farms in infected areas**
  - **Live animal markets in infected areas**
  - **Uncooked poultry**
  - **Blood from birds**
  - **Feces from birds**
  - **Other fluids from birds**
- **Eating raw or uncooked, infected poultry or their eggs**
  - **Thoroughly cooking poultry/eggs is best prevention**
- **No sustained human to human transmission yet**

Medical Treatments

- **Antiviral medications can help if taken within 48 hours after symptoms start, and might be beneficial even if taken past the 48 hour time frame**

- **Take antiviral medications only when directed**
  - **Virus could quickly develop widespread resistance to antiviral medications if they are used unnecessarily**

- **Additional medical care and hospitalization if needed**

Protecting Yourself and Others

- **Frequent hand washing with soap and water or waterless hand cleaners**
  - **Hands are very common way to spread infections**
- **Use “cough etiquette”—cover mouth and nose when coughing and sneezing**
  - **Droplets are also a common way to spread infection**
- **Practice “social distancing”—limiting contact and closeness to others to decrease chance of exposure**
  - **Limit unnecessary travel**
  - **Avoid public gatherings**
- **Personal protective equipment**
  - **Medical personnel will use routine medical precautions (i.e., wear of mask, gloves, etc.) when working with people who have flu symptoms**
  - **Wear of surgical-type masks by anyone with flu symptoms may help reduce droplet spread**

How can I prevent spreading the flu?

- **Avoid closeness to those with respiratory illnesses**
  - **Limiting exposure decreases your chances of becoming ill**
- **Avoid touching your mouth and nose**
  - **Reduces chance of infecting yourself with viral particles on your hands**
- **Cover your mouth and nose when you cough/sneeze**
  - **Use upper sleeve, not your hand, if tissue is not available**
- **Wash your hands frequently with soap and water or waterless hand cleaners**
  - **Especially after you cough or sneeze**
- **Maintain a healthy lifestyle**
  - **Exercise, rest, and eating balanced meals maintains body's ability to fight infection**
- **Avoid smoking and second hand smoke**
  - **Smokers have higher hospitalization and death rates from flu**

How can I prevent spreading the flu?

- **Get the seasonal flu shot as early you can**
- **If you feel sick, stay at home**
  - **Don’t share your illness**
  - **Contact your doctor for advice and assistance**
- **Wear a mask if told to do so**
- **Once available, and when advised to do so, get an avian flu shot**

Why should I get a seasonal flu shot?

- **Single most effective way to protect yourself**
  - **Effective against seasonal flu that still causes illness/deaths**
- **May help your doctor treat you more effectively**
- **May prevent you from needing hospital care for flu**

How do I prepare my family?

- **Prepare your family as you would for natural disasters**
- **Plan for worst-case scenarios such as several family members becoming ill**
- **Discuss and make alternate plans, including:**
  - **Family plan, child care, pet care – 4-6 weeks supplies on hand**
  - **Plan for additional food and water storage (4-6 week supply)**
  - **Plan for impact of utility outages (i.e., power, water, etc.)**
  - **4-6 week supply prescription meds, first aid kit, generic meds**
  - **Limit trips to public areas to minimize exposure**
  - **Designate emergency meeting places and points of contact for family members if they become separated**
  - **Ensure routine immunizations are current**
  - **List and share all important contact phone numbers**
  - **Coordinate with your service's family support groups for help as needed**

What if I think I have the flu?

- **Practice cough etiquette**
- **Notify family/office and report to sick call/medical care**
  - **Call to confirm sick call location—an alternate sick call site may be designated during a pandemic**
  - **Put on a mask if advised to do so**
- **Notify your chain of command**
  - **Discuss staying at home to reduce infections in work area**
- **Report your recent travel history to your doctor**
- **Report any contact with sick people or sick birds to your doctor**
- **Contact your doctor with any other questions**

Resources

- **U.S. pandemic influenza information and plan**
  - www.pandemicflu.gov
- **U.S. public health guidelines**
  - www.cdc.gov
- **Global updates and official case reports**
  - www.who.int

Questions?